

**PUBLIC WORKSHOP TO DISCUSS POSSIBLE REGULATORY APPROACHES TO
REDUCE EMISSIONS FROM STATIONARY DIESEL-FUELED ENGINES AND
TRANSPORTATION REFRIGERATION UNITS**

Proposed Airborne Toxic Control Measure to Reduce Diesel Particulate Matter Emissions from New Stationary Diesel-Fueled Engines

April 4, 2002



California Environmental Protection Agency

Air Resources Board

Proposed New Stationary Diesel-Fueled Engine ATCM

- **Who must comply?**
- **Are there any exemptions from meeting the ATCM requirements?**
- **What are the standards?**
- **What are the recordkeeping, reporting, and monitoring requirements?**
- **What is the schedule for ATCM development?**

When would the proposed ATCM be effective?

- District APCO has up to 120 days to:
 - ◆ Implement and enforce the requirements of this ATCM; or
 - ◆ Propose district regulation, as provided in Health and Safety Code section 39666(d).
- Tentatively in the March-April 2004 timeframe

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Proposed ATCM would apply to new stationary diesel-fueled engines

- Used in prime and emergency standby applications
- Greater than or equal to 50 brake-horsepower (bhp)
 - ◆ Any person who sells, leases, purchases, owns, or operates engine for use in California
- Less than 50 bhp
 - ◆ Any person who sells or offers engine for sale for use in California

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What is a “New” Stationary Diesel-Fueled Engine?

- Engine installed at new or existing stationary source after ATCM effective date. Exact replacement is considered a new engine;
- Engine relocated from an off-site location; or
- Engine that is reconstructed, where cost of any single reconstruction is greater than 50% of new engine purchase price.

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What exemptions are being proposed in this ATCM?

- Engines that are primarily used in agricultural operations
 - ◆ Working with agricultural community to develop approach

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Notification

■ Greater than or equal to 50 bhp

- ◆ Owner/operator to provide District APCO with detailed information on engine and activity
 - ✦ e.g., contact information, engine and engine use, typical operation, identification of emission control strategies currently in place, and type of fuel used
- ◆ Permit data may suffice provided APCO approves

■ Less than 50 bhp

- ◆ Sellers to provide data each year to ARB on engines sold for use in California

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What are the proposed emission standards for engines used in prime applications?

■ Greater than or equal to 50 bhp

- ◆ 0.01 g/bhp-hr PM
- ◆ Applicable model year NMHC+NO_x, CO limits in Off-Road Compression-Ignition Regulation
- ◆ If pre-1996 engine, meet 1996 model year NMHC+NO_x, CO limits in Off-Road Regulation
- ◆ NO₂ weight fraction no more than 20% by-weight of total NO_x emissions

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What are the proposed emission standards for engines used in emergency standby applications?

■ Greater than 50 bhp

- ◆ 0.15 g/bhp-hr PM or applicable model year PM limit in Off-Road CI Engine Regulation, whichever is lower
- ◆ Applicable model year NMHC+NO_x, CO limits in Off-Road Compression-Ignition Regulation
- ◆ If pre-1996 engine, meet 1996 model year NMHC+NO_x, CO limits in Off-Road Regulation
- ◆ NO₂ weight fraction no more than 20% by-weight of total NO_x emissions

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What are the proposed emission standards for engines less than 50 brake horsepower?

- ◆ Applicable model year PM, NMHC+NO_x, CO limits in Off-Road Compression-Ignition Regulation
- ◆ If pre-2000 engine, meet 2000 model year PM, NMHC+NO_x, CO limits in Off-Road Regulation

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Proposed Fuel Usage Requirement

- **Owner or operator must use**
 - ◆ **at a minimum, fuel that meets specification for CARB diesel, or**
 - ◆ **verified alternative fuel**

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Initial Compliance Demonstration

- **Submit off-road engine certification data or emission test data to district APCO**
- **Engine emission test data**
 - ◆ **ARB Method 5 and 100, carried out under steady state operation in accordance with ISO 8178 loading cycles**
 - ◆ **NO₂ test method measurement in accordance with Verification Procedure**
 - ◆ **Alternative methods approved by district APCO**

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Additional requirements for emergency standby engines

- Installation of a non-resettable hour meter
- Owner/operator must keep log of usage
 - ◆ Total hours
 - ◆ Maintenance/testing
 - ◆ Emission testing pursuant to ATCM
 - ◆ Emergency hours and nature of emergency

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Backpressure monitoring requirements for DPF technologies

- Backpressure monitor required to notify owner/operator when high backpressure limit of engine is approached
- District APCO can require additional monitoring dependent on control strategy used

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Schedule for Development and Next Steps

- **Consider comments on draft regulatory language**
- **Meetings with stakeholders (on-going)**
- **Workshop in June-July timeframe**
- **Additional workshops as needed**
- **Tentative Board Hearing in Spring 2003**

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